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RECENTLY PUBLISHED RESEARCH OF THE SARATOV EDICAL LESTITUTE, USSR

"Mixed and Combined Action of Some Barbiturates (Medinal and Hexenal) with Chloroform, Sther, and Alcohol on Isolated Frog Heart, S. P. Zakrividoroga, Saratov Med

"Farmakol i Toksikel" Vol 7, 15 1, 1946, pp 53-8

Hexenal (I) and medinal (II) in admixture with CHCl3, other, or alcohol exert additive effects on isolated frog heart, whether given in therapeutic or toxic doses. Among combined effects (one drug given before the other), CRCl₂ contributes more toxicity than does ether or alcohol after dosage with 1; but ether or alcohol brings out toxicity of I more sharply than doos CHCl3. Results based on changes in rhythm, amplitude, and tonus of isolated frog heart after 5-10 minutes of treatment with single or mixed drug solutions, e.g., 250 ppm of I, 500 ppm of II, 125 ppm each of I and CHCl₃, or 250 ppm of I with 125 ppm of CHCl3. A typical pair for combined effects (successive dosages) was 500 ppm of CHCl3 and 5,000 ppm of I, given in either sequence.

"Mixed and Combined Effocts of Barbiturate with Morphine, Pantopon, Magnesium Sulfate, and Local Anesthetics on Isolated Frog Hearts." S. P. Zakrividoroga, Saratov Med

"Farmakol i Toksikol" Vol 10, No 2, 1947, pp 24-31

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Tests are reported with medinal (I), morphine (II), hexenal (III), pantopon (IV), LigSO_L (V), cocaine (VI), procaine (VII), dicaine (VIII), and sovcaine (IX), single and in blends or sequence pairs. Concentrations are in parts per million. When equal volumes of II (6,250) and III (5,000) are mixed, a white precipitate forms in 3-5 minutes in Ringer solution, or 6-10 minutes in distilled water. This compound is so toxic that the blend of solutions at 1/12 the toxic concentration of II and III is toxic. Similar synergistic action is observed with I and II. Clinical use of III in combination with barbiturates is contraindicated. A blend of IV (2,000) and III (5,000) forms a white precipitate, but without synergistic intensification of toxicity. Given after III. VIII and IX show antegonism instead of synergism: and there are other instances of antagonism in blends, or pairs given in sequence. Compounds formed by synergistic pairs have not been identified. Effects of the drugs on rhythm, amplitude, and tomus are given. When IX (0.5) was given after II (125), toxicity was decreased as compared with IX alone; when II followed IX, effect on rhythm was lessened but toxicity to amplitutes and tenus was intensified. The barbiturates, in the blends, decrease bradycardia and act as local anesthetics, showing direct antagonism.

"Blood Proteins and Their Dynamics in Suppurative Processes," Ta. E. Kolodeznays, Saratov Med Inst

"Klin Hed" Vol 23, No 6, 1915, pp 49-50

Total proteins and their composition were determined in the blood of a number of cases of patients with suppurative infections. Total protein level was usually within normal fluctuations. However, there was a pronounced and steady rise of the globulin proportion and drop of albumin fraction. In the course of involution of the process, this tendency was reversed. This is explainable by the fact that antibodies formed in the reticulo-endothelial cells are modified molecules of the blood globulin.

Comparative Influence and Therapeutic Range of Action os Some Drugs on Leolated Rearts of Cold-Blooded Animals," S. P. Zakrividoroga, Saratov Med Inst

"Farmakol i Toksikol" Vcl 8, No 5, 1945, pp 10-14

Ratios of toxic does to minimum effective dose and the coefficients of toxic doesge (reference CHCl₂ml (at concentration of 1000 pml were measured for 27 drugs by the effect on rate, smplitude, and tonus of frog heart. The drugs include the following in order of their concentration in parts per million: pontceaine, soveaine, lobeline-HCl, cuabain, hexetone, cocaine-HCl, strychnine-HCl₂, camphor, advanaline-HCl, procaine, pentopon, scopolamine-HBr, strypine-H₂SO₄, ephadrine.

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Sanitized Copy Approved for Release 2011/06/29 : CIA-RDP80-00809A000600200129-RESTRICTED **STAT** herenal, nicotine base, ha phenobarbital, morrhine-HCl, MgSOh, pricrotoxin, Na barbital, %tgC, caffeine, metrazole, and %toH. Highest TD/M3D ratios were shown by stronine-HpSOh 5,000, scopolamine-HBF 6,900, and strychnine-FEOx 2,000. Coefficients of tomic dosage increased in the order of drugs ranging from 0,0125 for pontocaine to 66.6 for %toH. RESTRICTED

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